

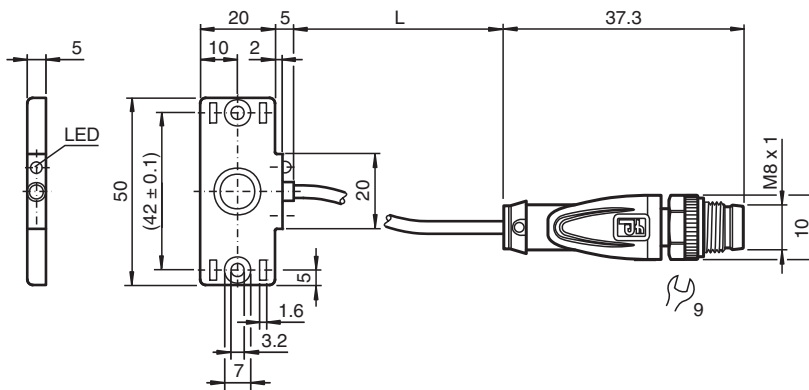


## Capacitive sensor CBN10-F46-E2-0,4M-V3

- 10 mm non-flush
- 3-wire DC
- Flat housing
- Mounting slots for cable ties
- Cable with M8 plug



### Dimensions



### Technical Data

General specifications		
Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	$s_n$	10 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	$s_a$	0 ... 7 mm
Output type		3-wire
Nominal ratings		
Installation conditions		
B		5 mm
C		20 mm
F		20 mm / 50 mm
Operating voltage	$U_B$	10 ... 30 V DC
Switching frequency	f	0 ... 5 Hz
Hysteresis	H	1 ... 10 % typ. 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	$U_d$	$\leq 2$ V
Voltage drop at $I_L$		

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## Technical Data

Voltage drop $I_L = 10 \text{ mA}$ , switching element on	$U_d$	0.8 ... 2.2 V typ. 1.4 V
Operating current	$I_L$	0 ... 100 mA
Lowest operating current	$I_m$	0 mA
Off-state current	$I_r$	0 ... 0.5 mA typ. 0.01 mA
Off-state current $T_U = 40 \text{ °C}$ , switching element off		$\leq 100 \text{ }\mu\text{A}$
No-load supply current	$I_0$	$\leq 15 \text{ mA}$
Time delay before availability	$t_v$	$\leq 50 \text{ ms}$
Switching state indicator		LED, yellow
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>		1210 a
Mission Time ( $T_M$ )		20 a
Diagnostic Coverage (DC)		0 %
<b>Compliance with standards and directives</b>		
Standard conformity		
Standards		EN IEC 60947-5-2
<b>Approvals and certificates</b>		
UL approval		cULus Listed Load Type: General Purpose Enclosure Type Rating: Type 1 Supply/Switching Voltage:
CCC approval		CCC approval / marking not required for products rated $\leq 36 \text{ V}$
<b>Ambient conditions</b>		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
<b>Mechanical specifications</b>		
Connection type		fixed cable with plug
Housing material		PBT
Sensing face		PBT
Degree of protection		IP67
Connector		
Threading		M8 x 1
Tightening torque		$\leq 0.4 \text{ Nm}$
Number of pins		3
Cable		
Cable diameter		$3.5 \text{ mm} \pm 0.2 \text{ mm}$
Bending radius		$> 10 \times \text{cable diameter}$
Material		PVC
Color		grey
Number of cores		3
Core cross section		$0.14 \text{ mm}^2$
Length	L	0.4 m
Mass		25 g
<b>Dimensions</b>		
Height		5 mm
Width		50 mm
Length		25 mm

**Connection Assignment**



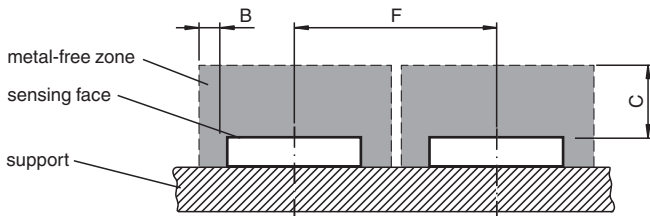
**Connection Assignment**



Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
3	BU	(blue)
4	BK	(black)

**Installation Conditions**



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